PATENT

IN THE UNITED STATES PATENT & TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS & INTERFERENCES

Applicant:	KAPOOR ET AL.	)	
		)	Examiner S. Aminzay
Appl. No.	09/933,321	)	
		)	Art Unit 2684
Confirm. No.	7056	)	
		)	Atty. Docket No. CS11343
Filed:	20 August 2001	)	

Title: "Cellular Telephone And Multimedia Accessory Audio System Adapter And Methods Therefor"

APPEAL BRIEF UNDER 37 CFR § 41.37(c)

Assistant Commissioner for Patents
Alexandria, Virginia 22313

Sir:

Real Party In Interest

The real party in interest is Motorola Inc., by virtue of an assignment duly executed by the named inventor(s) and recorded in the Patent Office.

Related Appeals & Interferences

There are no related appeals or interferences.

Status of Claims

Claims 1-20 are pending and are reproduced below in the Claims Appendix.

Claims 1-7 and 16-20 are allowed. Claims 11 and 13-15 were indicated as being allowable but stand objected to for dependence on rejected base or intermediate claims.

Claims 8-10 and 12 stand finally rejected and are the subject of the instant appeal.

Status of Amendments

An amendment under 37 CFR 1.116 has been submitted with the filing of this Brief. The amendment makes only grammatical and idiomatic changes to the Description. The Claims were last amended on 22 May 2007.

Summary of Claimed Subject Matter

Claim 8 is drawn to an audiocassette adapter for coupling a mobile electronic device to an audiocassette player (page 2: 25–page 3: 1 and FIG. 1). The audiocassette adapter comprises a cassette head coupling device (page 2: 19–21 and FIG. 1), a mobile electronic device input coupled to the cassette head coupling device (page 3: 3–4 and FIG. 1), an audiocassette player command signal generator and a control signal output coupled to the audiocassette player command signal generator (page 6: 9–page 8: 15 and FIG. 3).

Grounds of Rejection for Review on Appeal

Whether the drawings comply with 37 CFR 1.83(a).

Whether Claims 8-10 and 12 are anticipated by U.S. Patent No. 6,058,319 (Sadler) under 35 USC 102(e).

Discussion of Drawing Objection

Objection Summary

The drawings stand objected to under 37 CFR 1.83(a) allegedly for failure to illustrate the claimed "command signal generator" and "rotational transducer".

Discussion

Contrary to the Examiner's suggestion, the drawings illustrate the "command signal generator" and the "rotational transducer". According to the original specification, at page 6: 18 – page 8: 3,

> In one embodiment, the audiocassette player command signal generator comprises a rotational transducer with a transducer output coupled to the control signal output of the audiocassette adapter. In FIG. 3, for example, the cassette adapter 300 comprises a rotatable spur gear 302 having conductive portions 304 separated by nonconductive portions 306. First and second slide contacts 308 mounted on some portion of the cassette adapter 300 are biased into contact with the rotatable spur gear 302. As the gear 302 rotates, the conductive portions 304 thereof periodically electrically interconnect the contacts 308 depending on the rotational position of the gear.

The conductive portions 304 are arranged so that unique output signals are generated for the various modes of operation of the cassette player to which the cassette adapter is coupled. The exemplary embodiment spur gear provides unique signals for forward, reverse, fast forward and fast reverse. Other arrangement of the conductive and non-conductive portions 304 and 306 of the spur gear will also provide unique signals suitable for the purposes of the present invention.

In one embodiment, the audiocassette player command signal generator of the cassette adapter also comprises a cassette head actuatable switch with a switch output coupled to the control signal output of the audiocassette adapter. Such a switch detects the whether the play or stop command has been actuated by detecting whether the player head is engaged with the cassette head coupling device or adapter.

In FIG. 3, for example, the cassette adapter 300 comprises a momentary switch including first and second contacts, engaged upon actuation of a spring biased cassette head actuatable member. Two contacts 310 and 312 are mounted is spaced apart relation on a movable mounting member 314 on which a cassette head coupling device 316 is mounted. Another contact 318 is mounted fixedly on a portion of the cassette adapter. One or more springs 320 bias the contacts 310 and 312 of the mounting member 314 into engagement with the contact 318 when the head coupling device 316 is not operably engaged with a cassette player head, thus closing a circuit formed by contacts 310 and 312. The mounting member 314 is movable against the bias of the springs 320 upon engagement of the coupling device 316 with a cassette player head thus moving the contacts away from the contact 318 and forming an open circuit.

Alternatively, the contact 318 may be mounted on the member 314 and the contacts 310 and 312 may be mounted on the stationary portion. Other switch configurations may also be used for detecting when the play and stop commands are actuated, for example a single contact may be disposed on the movable member, or a different switch may be used, for example a micro-switch may be mounted on the movable mounting member 314 and actuated upon contacting some fixed portion of the cassette adapter.

The outputs of the switch and transducer may also be combined logically to provide unique outputs. In FIG. 4, for example, outputs from the rotational transducer and from the head actuation switch are combined in an XOR logic gate to produce a single control signal output.

According to the original disclosure, the "command signal generator" comprises a "rotational transducer". In the exemplary embodiment of FIG. 3, the "rotational transducer" is implemented in the form of a spur gear (302) having conductive portions (304) separated by non-conductive portions (306) that engage slide contacts (308) during rotation, wherein the conductive portions 304 are arranged so that unique output signals suitable for the present invention as discussed more fully in the specification. For these reasons, the drawings comply with 37 CFR 1.83(a) and revised drawings are not required. Kindly withdraw the drawing objection.

Arguments re: Sadler

Rejection Summary

Claims 8-10 and 12 stand rejected under 35 USC 102(e) for anticipation by U.S. Patent No. 6,058,319 (Sadler).

Discussion of Claim 8

Regarding Claim 8, Sadler fails to disclose an

> ... audiocassette adapter for coupling a mobile electronic device to an audiocassette player, comprising:
> a cassette head coupling device;
> a mobile electronic device input coupled to the cassette head coupling device;
> an audiocassette player command signal generator;
> a control signal output coupled to the audiocassette player command signal generator.

At col. 2: 34-44, Sadler discusses a hands-free kit (50) comprising a coupling unit (52), a cassette adapter (70) and an external microphone. The cassette adapter (70) of Salder arguably corresponds to the "audiocassette adapter" of Claim 8. In Sadler, however, neither the cassette adapter (70) nor the coupling unit (52), alone or in combination, include an "audiocassette player command signal generator" and a "control signal output coupled to the audiocassette player command signal generator" as recited in Claim 8.

The various passages of Sadler referenced by the Examiner do not support the assertion that Sadler discloses an "audiocassette player command signal generator". The cassette adapter of Sadler merely ports audio signals from a handset to a cassette player for playback on the audio system. Particularly, at col. 1: 50-57, Sadler discloses a cassette adapter audio circuit/head that applies audio signals to a play-back head of a cassette player for processing as if the audio signals had been reproduced from a cassette tape. At col. 3: 7-11, Sadler discusses a coupling unit (52) comprising a coupling circuit (60) for connecting the cassette adapter (70) and the mobile unit (12). At col. 3: 24-43, Sadler discloses the mechanical structure of the cassette adapter (70) including a record head (84) that transfers audio signals to a play-back head of an audiocassette player.

The cassette adapter (70) of Sadler does not include any structure corresponding to the "audiocassette player command signal generator" of Claim 8. In Claim 8, the "audiocassette player command signal generator" generates control signals corresponding to common audiocassette commands, e.g., play or stop, via the "control signal output". The cassette adapter of Sadler does not generate and output any audio cassette player commands, e.g., play or stop. In Sadler, the cassette adapter only transfers audio signals to the cassette player.

The "audiocassette player command signal generator" permits one to control functions of the mobile electronics device using of an audiocassette player controls (e.g., play, stop, FF, REW, etc.) to which the "audiocassette adapter" is coupled. The cassette adapter of Sadler does not provide cassette player control commands to an electronic device coupled to the adapter. Thus Claim 8 is patentably distinguished over Sadler.

Discussion of Claim 9

Regarding Claim 9, Sadler fails to disclose in combination with the limitations of Claim 8,

> ... the audiocassette player command signal generator for outputting unique control signals in response to corresponding audiocassette player commands.

At col. 3: 7-11, Sadler discusses the coupling unit (52) comprising a coupling circuit (60) for connecting the cassette adapter (70) and the mobile unit (12). At col. 3: 24-43, Sadler discusses the mechanical structure of the cassette adapter (70) including a record head (84) that transfers audio signals to a play-back head of an audiocassette player. The cassette adapter (70) of Sadler does not include any structure corresponding to the "audiocassette player command signal generator" of Claim 8. In Sadler, the cassette adapter only transfers audio signals from the mobile handset to the cassette player. The cassette adapter of Sadler does not generate and output any audiocassette player commands corresponding to audio cassette player commands. In the present invention, such commands enable controlling the mobile handset using the cassette player controls. Claim 9 is further patentably distinguished over Sadler.

Discussion of Claim 10

Regarding Claim 10, Sadler fails to disclose in combination with the limitations of Claim 8,

> ... the audiocassette player command signal generator comprising a rotational transducer with a transducer output coupled to the control signal output of the audiocassette adapter.

In FIG. 3, Sadler discloses an electrical schematic of the cassette adapter (70) and the coupling circuit (60) and a portion of the mobile unit (12). Sadler however does not disclose a rotational transducer in the cassette adapter (70). In Sadler, the cassette adapter (70) includes record heads (84). Claim 10 is thus further patentably distinguished over Sadler.

Discussion of Claim 12

Regarding Claim 12, Sadler fails to disclose in combination with the limitations of Claim 8,

> ... the audiocassette player command signal generator comprising a cassette head actuatable switch with a switch output coupled to the control signal output of the audiocassette adapter.

Sadler does not disclose an audiocassette command signal generator and thus Sadler cannot disclose an audiocassette command signal generator having a "cassette head actuatable switch with a switch output coupled to the control signal output of the audiocassette adapter" as in Claim 12. The "switch" detects whether the cassette player head is engage with the

adapter thereby indicating whether the cassette player stop or play command has been actuated. Claim 12 is thus further patentably distinguished over Sadler.

Prayer for Relief

In view of the discussion above, all Claims of the present application are in condition for allowance. Kindly remand the application with instructions to withdraw any rejections and objections and allow the application to issue as a United States Patent without further delay.

Respectfully submitted,

/ ROLAND K. BOWLER II /

_____

ROLAND K. BOWLER II 5 JUNE 2008
REG. NO. 33,477

MOTOROLA, INC.
INTELLECTUAL PROPERTY DEPT. (RKB)
600 NORTH U.S. HIGHWAY 45, W4-37Q
LIBERTYVILLE, ILLINOIS 60048

TELEPHONE NO. (847) 523-3978
FACSIMILE NO. (847) 523-2350

CLAIMS APPENDIX

1. (Original) An audiocassette adapter for coupling a mobile wireless communication station to an audiocassette player, comprising:

a cassette head coupling device;

a cassette adapter insertion detect switch;

a mobile wireless communication station coupling device having a mobile wireless communication station audio input coupled to the cassette head coupling device,

the mobile wireless communication station coupling device having an insertion detect signal output coupled to the cassette adapter insertion detect switch.

2. (Original) The audiocassette adapter of Claim 1, the audiocassette adapter having a multimedia accessory coupling device having a multimedia input coupled to the cassette head coupling device.

3. (Original) The audiocassette adapter of Claim 2, the multimedia accessory coupling device having a multimedia mute output coupled to a multimedia mute input on the mobile wireless communication station coupling device.

4. (Original) The audiocassette adapter of Claim 1, the cassette adapter insertion detect switch having a state for indicating that the cassette head coupling device is operably coupled to a head of the audiocassette player.

5. (Original) The audiocassette adapter of Claim 1, an audiocassette player command control signal output on the cassette adapter.

6. (Original) The audiocassette adapter of Claim 1, a control signal output on the cassette adapter coupled to an audiocassette player command signal generator for outputting control signals in response to audiocassette player commands.

7. (Original) The audiocassette adapter of Claim 6, the audiocassette player commands include play, forward, rewind, stop and pause.

8. (Previously Presented) An audiocassette adapter for coupling a mobile electronic device to an audiocassette player, comprising:

a cassette head coupling device;

a mobile electronic device input coupled to the cassette head coupling device;

an audiocassette player command signal generator;

a control signal output coupled to the audiocassette player command signal generator.

9. (Original) The audiocassette adapter of Claim 8, the audiocassette player command signal generator for outputting unique control signals in response to corresponding audiocassette player commands.

10. (Original) The audiocassette adapter of Claim 8, the audiocassette player command signal generator comprising a rotational

transducer with a transducer output coupled to the control signal output of the audiocassette adapter.

11. (Original) The audiocassette adapter of Claim 10, the audiocassette player command signal generator comprising a rotatable spur gear having a conductive portions separated by nonconductive portions, first and second slide contacts contacting the rotatable spur gear.

12. (Original) The audiocassette adapter of Claim 8, the audiocassette player command signal generator comprising a cassette head actuatable switch with a switch output coupled to the control signal output of the audiocassette adapter.

13. (Original) The audiocassette adapter of Claim 8, the audiocassette player command signal generator comprising a momentary switch including first and second contacts, one of the first and second contacts disposed on a spring biased cassette head actuatable member.

14. (Previously Presented) The audiocassette adapter of Claim 8,

the audiocassette player command signal generator comprising a cassette head actuatable switch, the audiocassette player command signal generator comprising a rotational transducer;

a logic device having an output coupled to the control signal output;

a switch output of the cassette head actuatable switch coupled to an input of the logic device, a transducer output of the rotational transducer coupled to another input of the logic device.

15. (Original) The audiocassette adapter of Claim 14, the audiocassette player command signal generator for outputting unique control signals in response to corresponding audiocassette player commands.

16. (Original) A method for coupling a mobile wireless communications station to an audio system with a cassette adapter disposable in a cassette player, comprising:

detecting when the cassette adapter is disposed operably in the cassette player;

providing a cassette adapter insertion detect signal to a mobile wireless communication station coupling device output on the cassette adapter when the cassette adapter is disposed operably in the cassette player.

17. (Original) The method of Claim 16, providing a multimedia device mute signal to a multimedia output of the cassette adapter.

18. (Original) The method of Claim 16, providing the multimedia device mute signal to a multimedia output of the cassette adapter when receiving an audio signal at an audio at a mobile wireless communication station audio input of the cassette adapter.

19. (Original) The method of Claim 16, providing a control signal at a control signal output of the cassette adapter in response to an audiocassette player command.

20. (Original) The method of Claim 16, providing control signals at a control signal output of the cassette adapter by generating unique control

signals with one of a rotational transducer of the cassette adapter and a momentary switch of the cassette adapter in response to audiocassette player play, forward, rewind, stop and pause commands.

EVIDENCE APPENDIX

(None)

RELATED PROCEEDINGS APPENDIX

(None)